

# Xirrus Wireless Array

## XN Series

Configurations: XN4, XN8, XN12, and XN16

DATASHEET

### Xirrus XN Series

The Xirrus XN Series Wireless Array can effectively replace a traditional Ethernet workgroup switch and provide users a wired experience over a wireless network. The unique design of Xirrus XN Series Wireless Arrays provides the ability to securely deliver data, voice, and video services to a large user population, at a reduced deployment and ownership cost compared to traditional wired networks.

With up to 16 Integrated Access Points in a single device, an Integrated Gigabit switch, firewall, threat sensor, and spectrum analyzer, the XN series provides a high performance wireless network with fewer devices. The integrated design of the XN-series reduces setup, installation, configuration, and management associated with a wireless network.

### At A Glance

- Available with 4, 8, 12 or 16 radios
- Supports up to 1280 users
- 4X the coverage and up to 8X the throughput of traditional AP's
- Onboard Gigabit switch
- Integrated firewall, threat sensor, and spectrum analyzer



### High Performance Through Unique Array Architecture

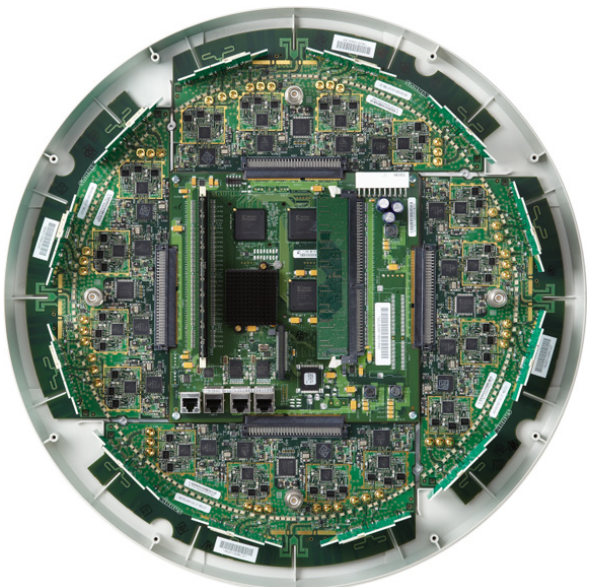
The Xirrus XN Wireless Array integrates up to 16 Wireless radios with an onboard wireless controller, gigabit switch, firewall, spectrum analyzer, and a dedicated wireless threat sensor into a single device.

Multiple radios are co-located in a circular configuration to create a radio Array that provides significant range, capacity, and RF management advantages. Each Integrated Access Point (IAP) uses a high gain, directional Antenna System to deliver increased transmit gain and receive sensitivity in all directions, resulting in up to 4X the coverage area of traditional AP / Wireless controller architectures.

By implementing the intelligence at the edge of the network, rather than in a centralized controller, the Xirrus Wireless Array improves network efficiency, lowers latency, improves network throughput, and simplifies network deployment.

The Xirrus 802.11n Array uses MIMO technology to support data rates up to 300 Mbps per radio. Multiple antennas are integrated into each IAP for up to 48 antennas per device. The Array's unique architecture provides an easy to install, aesthetically pleasing solution with no need for external cables or antennas.

### XIRRUS XN SERIES WIRELESS ARRAY



## Key Benefits

### High Performance

Gain the advantage of the high performance Xirrus Wireless Array delivering up to 4.8Gbps of RF bandwidth over an area 4X that of traditional APs. Support hundreds of users per Array to economically meet the business needs.

### Reliable Connectivity

Improve wireless network reliability with the Xirrus XN-series Wireless Arrays. With multiple points of redundancy and the ability to overlap adjacent RF sectors the wireless network can be configured to provide continual service even in the unlikely event of an access point failure.

### Secure Wireless Network

Maintain a secure wireless network with support for the latest wireless encryption and authentication standards. Monitor in real time for security threats with a built in Wi-Fi threat sensor and proactively prevent trouble from starting by automatically blocking rogue access points.

### Simplified Deployments & Management

Streamline the deployment of wireless access points with the Xirrus XN-series Wireless Arrays. Reduce the number of physical devices by up to 75% reducing complexity, installation time, cable pulls and network switch ports. Centrally manage and administer Xirrus Wireless Arrays, their configurations and performance from the Xirus Management System

## Configuration Specifications

	XN4	XN8	XN12	XN16
Chassis Size	13"	19"	19"	19"
Total Radios	4	8	12	16
802.11a/b/g/n Radios	4	4	4	4
802.11a/n Radios	-	4	8	12
Radio Types	11a/b/g/n: 2.4GHz or 5GHz	11a/b/g/n: 2.4GHz or 5GHz 11a/n: 5GHz	11a/b/g/n: 2.4GHz or 5GHz 11a/n: 5GHz	11a/b/g/n: 2.4GHz or 5GHz 11a/n: 5GHz
Maximum Wi-Fi Bandwidth	1.2Gbps	2.4Gbps	3.6Gbps	4.8Gbps
Dedicated Wi-Fi Threat Sensor	Yes	Yes	Yes	Yes
Integrated Antennas	20	36	36	48
Max Wi-Fi Backhaul	900Mbps	900Mbps	900Mbps	900Mbps
Gigabit Ethernet Uplink Ports	1	2	2	2
Maximum Associated Users	320	640	960	1280
Maximum Power Consumption	35W	60W	75W	90W

## Technical Specifications

FEATURE	SPECIFICATIONS
RF Management	Dynamic channel configuration Dynamic cell size configuration Monitor radio for threat assessment and mitigation Wired and wireless packet captures (including all 802.11 headers) Radio assurance for radio self test and healing RF monitor
High Availability	Supports hot stand-by Array for mission critical areas, Dual Gigabit uplink ports can be used for link aggregation, redundancy, or bridging (XN4 has 1 Gigabit Link)
Wireless Protocols	IEEE 802.11a, 802.11b, 802.11d, 802.11g, 802.11e, 802.11h, 802.11i, 802.11j, 802.11n
Wired Protocols	IEEE 802.3 10BASE-T , IEEE 802.3.u 100BASE-TX , 1000BASE-T, 802.3ab 1000BASE-T IEEE 802.1q - VLAN tagging IEEE 802.1AX - Link aggregation IEEE 802.1d - Spanning tree IEEE 802.1p - Layer 2 traffic prioritization



## Xirrus XN Series Wireless Array

FEATURE	SPECIFICATIONS	
RFC Support	RFC 768 UDP RFC 791 IP RFC 2460 IPV6 (Bridging only) RFC 792 ICMP RFC 793 TCP	RFC 826 ARP RFC 1122 Requirements for internet hosts - communication layers RFC 1542 BOOTP RFC 2131 DHCP
Security	WPA IEEE 802.11i WPA2, RSN RFC 1321 MD5 Message-digest algorithm RFC 2246 TLS protocol version 1.0 RFC 3280 Internet X.509 PKI certificate and CRL profile RFC 4347 Datagram transport layer security RFC 4346 TLS protocol version 1.1	
Encryption Types	Line speed, hardware-accelerated encryption modes: WPA TKIP WPA2 AES WEP 40/64 WEP 104/128	
Authentication	Open Pre-shared Key 802.1X EAP PEAP EAP-TLS	EAP-TTLS EAP-LEAP Pass-through Web Page Redirect (Captive Portal) MAC Address Access Control List (ACL) 802.1x RADIUS Authentication Server supporting EAP-PEAP
Regulatory Compliance	<b>Electromagnetic:</b> FCC Part 15.107 and 15.109, Class A ICES-003 (Canada) EN 301.893 (Europe) EN 301.489-1 and -17 (Europe)	<b>Safety:</b> EN 60950 EN 50371 to 50385 CE Mark
Physical Specifications	<b>Dimensions (WxDxH):</b> XN16: 18.65in (47.4cm) x 3.87in (9.83cm) x 18.65in (47.4cm) XN12: 18.65in (47.4cm) x 3.87in (9.83cm) x 18.65in (47.4cm) XN8: 18.65in (47.4cm) x 3.87in (9.83cm) x 18.65in (47.4cm) XN4: 12.58in (31.95cm) x 2.58in (6.55cm) x 12.58in (31.95cm) <b>Weight:</b> XN16: 10lbs (4.54kg) XN12: 10lbs (4.54kg) XN8: 9lbs 12oz (4.43kg) XN4: 3lbs 8oz (1.59kg)	
Environmental Specifications	Operating temperature: 0-55C, 0-90% humidity, non-condensing	
Channel Selection	Manual and automatic	
Wireless Frequency Bands	11a/n: 5.15-5.25 GHz (UNII 1) 11a/n: 5.15-5.25 GHz (TELECOM) 11a/n: 5.25-5.35 GHz (UNII 2) 11a/n: 5.470-5.725 (ETSI) 11a/n: 5.725-5.825 GHz (UNII 3) 11b/g/n: 2.412-2.462 GHz (FCC) 11b/g/n: 2.412-2.472 GHz (ETSI) 11b/g/n: 2.412-2.484 GHz (TELECOM)	
802.11a/n Antennas	Integrated 5dBi, sectored	
802.11b/g/n Antennas	Integrated 3dBi, sectored	
802.11a/b/g/n External Antenna Connectors	XN16: 3 RP-TNC Connectors XN12: 3 RP-TNC Connectors XN8: 3 RP-TNC Connectors XN4: 1 RP-TNC Connector	



## Xirrus XN Series Wireless Array

FEATURE	SPECIFICATIONS
Management Interfaces	Xirrus Management System (XMS) HTTPs Web Management Interface (WMI) Industry-standard command line interface via SSH, TELNET or Local Serial Console
Management	SNMPv1, v2c, v3 Import, export, and compare text-based configuration files NetFlow: IP flow information (traffic statistics may be sent to an external collector) Log messages can be stored on internal Syslog server or sent to up to three external syslog servers Cisco Discovery Protocol: CDP supported to obtain protocol addresses and platform information of neighboring devices

## Ordering Information

PART NUMBER	DESCRIPTION
XN4	4 Radio Wireless Array with on-board controller/switch 4 802.11a/b/g/n IAPs, DC Power
XN8	8 Radio Wireless Array with on-board controller/switch 4 802.11a/n IAPs, 4 802.11a/b/g/n IAPs, DC Power
XN12	8 Radio Wireless Array with on-board controller/switch 8 802.11a/n IAPs, 4 802.11a/b/g/n IAPs, DC Power
XN16	16 Radio Wireless Array with on-board controller/switch 12 802.11a/n IAPs, 4 802.11a/b/g/n IAPs, DC Power
<b>Software Licenses</b>	
AOS-x-N300	License to enable IAP's at 300Mbps (x=total number of IAPs on order)
AOS-x-RXM-ALL network services software	License to enable RPM (Performance), RSM (Security) and RAM (Analysis) feature options

## Support & Maintenance

Xirrus is committed to the success of our customers and provides warranties and support options to best fit your needs. Xirrus XN Series Wireless Arrays ship from the factory with a 5-year hardware warranty. For further information on the Xirrus hardware warranties, software support and premium support offerings visit:

<http://www.xirrus.com/support/warranty.php>

## About Xirrus

To organizations who depend on wireless access to transform their business, Xirrus is the wireless network solution provider that provides the world's most powerful, scalable, and trusted solutions. Through product invention and system design, commitment to customer success, and the industry's best price performance, Xirrus gives you confidence that your wireless network performs under even the most demanding circumstances. Headquartered in Thousand Oaks, CA, Xirrus is a privately held company and designs and manufactures its family of products in the USA



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